

ClaimsClaim 1.

An isolated, nematicidal protein wherein said protein comprises a nematicidal portion of an amino acid sequence selected from the group consisting of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:10, and SEQ ID NO:12.

Claim 2.

The protein of claim 1 wherein said protein comprises a nematicidal portion of SEQ ID NO:2.

Claim 3.

The protein of claim 1 wherein said protein comprises a nematicidal portion of SEQ ID NO:4.

Claim 4.

The protein of claim 1 wherein said protein comprises a nematicidal portion of SEQ ID NO:6.

Claim 5.

The protein of claim 1 wherein said protein comprises a nematicidal portion of SEQ ID NO:10.

Claim 6.

The protein of claim 1 wherein said protein comprises a nematicidal portion of SEQ ID NO:12.

Claim 7.

The protein of claim 1 wherein said protein comprises the amino acid sequence of SEQ ID NO:2.

Claim 8.

The protein of claim 1 wherein said protein comprises the amino acid sequence of SEQ ID NO:4.

Claim 9.

The protein of claim 1 wherein said protein comprises the amino acid sequence of SEQ ID NO:6.

Claim 10.

The protein of claim 1 wherein said protein comprises the amino acid sequence of SEQ ID NO:10.

Claim 11.

The protein of claim 1 wherein said protein comprises the amino acid sequence of SEQ ID NO:12.

Claim 12.

An isolated, nematicidal protein wherein said protein comprises a nematicidal portion of a δ-endotoxin obtainable from a *Bacillus thuringiensis* isolate selected from the group consisting of PS17 (NRRL B-18243), PS33F2 (NRRL B-18244), PS63B (NRRL B-18246), and PS69D1 (NRRL B-18247).

Claim 13.

The protein of claim 12 wherein said *Bacillus thuringiensis* isolate is PS17 (NRRL B-18243).

Claim 14.

The protein of claim 12 wherein said *Bacillus thuringiensis* isolate is PS33F2 (NRRL B-18244).

Claim 15.

The protein of claim 12 wherein said *Bacillus thuringiensis* isolate is PS63B (NRRL B-18246).

Claim 16.

The protein of claim 12 wherein said *Bacillus thuringiensis* isolate is PS69D1 (NRRL B-18247).

Claim 17.

The protein of claim 15 wherein said δ-endotoxin comprises the amino acid sequence of SEQ ID NO:20.

Claim 18.

The protein of claim 15 wherein said δ-endotoxin comprises the amino acid sequence of SEQ ID NO:23.

Claim 19.

The protein of claim 16 wherein said δ-endotoxin comprises the amino acid sequence of SEQ ID NO:21.

Claim 20.

The protein of claim 14 wherein said δ-endotoxin comprises the amino acid sequence of SEQ ID NO:22.

Claim 21.

The protein of claim 12 wherein said protein comprises the amino acid sequence of a δ-endotoxin obtainable from a *Bacillus thuringiensis* isolate selected from the group consisting of PS17 (NRRL B-18243), PS33F2 (NRRL B-18244), PS52A1 (NRRL B-18245), PS63B (NRRL B-18246), and PS69D1 (NRRL B-18247).

Claim 22.

The protein of claim 21 wherein said *Bacillus thuringiensis* isolate is PS17 (NRRL B-18243).

Claim 23.

The protein of claim 21 wherein said *Bacillus thuringiensis* isolate is PS33F2 (NRRL B-18244).

Claim 24.

The protein of claim 21 wherein said *Bacillus thuringiensis* isolate is PS63B (NRRL B-18246).

Claim 25.

The protein of claim 21 wherein said *Bacillus thuringiensis* isolate is PS69D1 (NRRL B-18247).

Claim 26.

A method for controlling a nematode pest wherein said method comprises administering a nematicidal protein to said pest so that said pest ingests said protein, wherein said protein comprises a nematicidal portion of an amino acid sequence selected from the group consisting of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, and SEQ ID NO:10.

Claim 27.

The method of claim 26 wherein said protein comprises a nematicidal portion of SEQ ID NO:2.

Claim 28.

The method of claim 26 wherein said protein comprises a nematicidal portion of SEQ ID NO:4.

Claim 29.

The method of claim 26 wherein said protein comprises a nematicidal portion of SEQ ID NO:6.

Claim 30.

The method of claim 26 wherein said protein comprises a nematicidal portion of SEQ ID NO:10.

Claim 31.

The method of claim 26 wherein said protein comprises the amino acid sequence of SEQ ID NO:2.

Claim 32.

The method of claim 26 wherein said protein comprises the amino acid sequence of SEQ ID NO:4.

Claim 33.

The method of claim 26 wherein said protein comprises the amino acid sequence of SEQ ID NO:6.

Claim 34.

The method of claim 26 wherein said protein comprises the amino acid sequence of SEQ ID NO:10.

Claim 35.

A method for controlling a nematode pest wherein said method comprises administering a nematicidal protein to said pest so that said pest ingests said protein, wherein said protein comprises a nematicidal portion of a δ -endotoxin obtainable from a *Bacillus thuringiensis* isolate selected from the group consisting of PS33F2 (NRRL B-18244), PS52A1 (NRRL B-18245), and PS69D1 (NRRL B-18247), wherein said δ -endotoxin comprises SEQ ID NO:22 when said isolate is PS33F2, said δ -

endotoxin comprises SEQ ID NO:19 when said isolate is PS52A1, and said δ -endotoxin comprises SEQ ID NO:21 when said isolate is PS69D1.

Claim 36.

The method of claim 35 wherein said isolate is PS33F2 and said δ -endotoxin comprises SEQ ID NO:22.

Claim 37.

The method of claim 35 wherein said isolate is PS69D1 and said δ -endotoxin comprises SEQ ID NO:21.